

Chris Parks

I created outer space for Hollywood – in a Pyrex dish

No, I didn't meet Rachel Weisz. Nor Hugh Jackman. In fact, I met the director, Darren Aronofsky, only once, when he first came to England, two years ago, to ask me if I would work on his new film, *The Fountain*. He had been all set to shoot it in 2002 with Brad Pitt and Cate Blanchett as leads: \$18 million was spent; vast sets were constructed; cast and crew were moved out to location in Australia. But, when Pitt pulled out at the last minute, production shut down. No star meant no movie, and Warner Bros pulled the plug.

By 2005, though, Darren was intent on resurrecting the film. And that's why he called my Oxfordshire studio unannounced from LA one afternoon. He had managed to persuade Warner Bros to fund a different version of *The Fountain*, and the film was back on again – on the proviso that my father, Peter, and I did the special effects. Darren had contacted us about working on the original project, for which we produced some unused sample material. Little did we know that, a few years later, this material would be unearthed and would prove the crucial factor in Warner Bros agreeing to relaunch the film. Our effects work would now be central to a re-imagined version.

Darren had liked the optical effects my father had done on the original *Superman* movies, and he was soon visiting us in England to set out his vision for his new film. For someone used to Hollywood's glitz and glam, I don't quite know what he made of our working environment – a bunch of old Cotswolds farm buildings converted into studios. Not that he seemed too uncomfortable chatting for hours under our ash trees.

A major chunk of *The Fountain* would be set in outer space, and Darren was determined to avoid the usual post-*Star Wars* depictions. He felt George Lucas's vision of space had become the standard that most directors after him were unwilling to challenge. But Darren was looking for something more organic, something with as little computer-generated imagery (CGI) as possible, something more real.

With CGI, everything has to be so precise and defined. So, if you want a spaceship to move from the left of shot to the right, you just use your computer to move it. But that doesn't allow for any of the randomness or unpredictability that's characteristic of how we see the world. It's just too clean. CGI also dates poorly. Digital imagery is constantly and rapidly improving, so what looked mind-blowing a year or two ago may look dated now. Remember the fanfare about *Jurassic Park* when it was first released over how realistic it

looked? Watching it again now, everyone can see that the dinosaurs are computer-generated. The modern eye keeps getting better at discerning details on screen.

It was with all this in mind that Darren approached me and my father. I'm sure it was a pleasant bonus that we were charging \$140,000, as opposed to the millions of dollars that CGI costs, but above all he wanted to tear up the rule book where depicting space on screen was concerned.

Our background in microphotography appealed to him. My father and I have made a career out of close-up shooting of the very small – such as marine plankton in the Great Barrier Reef or butterflies in Borneo – and we used this method, along with a technique called 'fluid painting', to capture the sort of cosmos Darren was seeking.

I'd start with a small Pyrex dish of clear liquids – this is my canvas, albeit a three-dimensional, constantly moving one. I'd then add single drops of paint, inks and dyes, and start to mix the liquids with my tiny brushes, needles and miniature palette knives. I use fluids that, through their mutual reaction, cause a microscopic movement or flow which I then capture in extreme close-up on moving film and in still photographs.

I'd try all sorts of ingredients in all sorts of positions in the dish. And where one shot might last 24 hours, another might be over in seconds. I'd send the film and thousands of still images digitally to Darren in America and see which came closest to his vision for outer space.

I recreated a meteor storm on our micro-level, for example, by mixing individual specks of curry powder with drops of alcohol and then capturing on film the resulting explosion. When finally 'sized up' and transferred to the big screen, it looks like an onslaught of flaming meteorites.

Our canvas is very small: sometimes we'd be shooting an area the size of a pinhead. Yet, by using specially developed optics, we can enlarge our pinhead-sized canvas to fill an Imax screen. It probably sounds counterintuitive for something as vast as outer space to be 'created' on a microscopic level, but the processes at work are very similar.

Despite the wholly different orders of magnitude, our work with fluid dynamics is as random, organic and explosive as space is. That's how we were able to recreate the surface of the sun using a combination of iodine, water,



SOMETIMES WE'D BE SHOOTING AN AREA THE SIZE OF A PINHEAD

colourings and other liquids that we prefer to keep secret. When brought together in just the right way, they have a movement, texture and reddy-orange colour that's indistinguishable from the real solar surface. When ultimately transferred to the big screen, that conveys the sun's awesome, galactic power.

The Fountain has finally been released; I guess I didn't stray too far from what Darren envisaged. I worked on the movie for six weeks, and then that was it. The day after I finished I was photographing another fluid painting for a local client. My first Hollywood movie has not changed my life – I am still working in my glam-free Oxfordshire studio, I am still making my own tea and my work is still microscopic rather than of gigantic Hollywood proportions. To the financiers in LA, I guess I was seen as some eccentric artist producing moving-paintings-cum-chemical-reactions in the wilds of the English countryside.

'The Fountain' is in cinemas now. Chris Parks was talking to Alastair Smart